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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,686	08/31/2001	Kiyoshi Kokubu	7217/65437	1263

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08/06/2003

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EXAMINER

ROY, SIKHA

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/943,686

Applicant(s)

KOKUBU, KIYOSHI

Examiner

Sikha Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,13,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,13,17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Amendment, filed on June 27, 2003 has been entered and is acknowledged by the Examiner.

Cancellation of claim 7 has been entered.

The indicated allowability of claims 1,5,6,13,17 and 18 are withdrawn in view of the newly discovered reference. The finality of the last Office Action is withdrawn and rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5 and 13, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,894,193 to Amrine et al. and further in view of U.S. Patent 4,941,582 to Morikawa et al .

Regarding claim 1 Amrine et al. disclose (column 3 lines 47-61 column 4 lines 6-35 Figs. 4 and 5) a sealing vessel (field emission display) 400 comprising a pair of flat plates 410 and 430, a frame member 300 pinched between the pair of flat plates and an adhering member (frit sealant) for sealing a space formed inside the frame member (frit land 323) by adhering to the flat plates at a contact location with the frame.

Amrine et al. disclose the claimed invention except for the adhering member adhering to the outer peripheral surface of the frame member. It would have been obvious matter of design choice to have the adhering member adhering to the outer peripheral surface of the frame, since the applicant has not disclosed that having the adhering member affixed to the outer peripheral surface of the frame solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the adhering member adhering to the pair of flat plates at a contact location with the frame as disclosed by Amrine et al.

Claim 1 differs from Amrine in that Amrine does not exemplify fixing block means for coupling the pair of flat plates at an outside the frame member and formed of a first metal fixing block adhered to one of the pair of flat plates and a second metal fixing block adhered to the other flat plate, the first and second metal blocks being welded together.

Morikawa in relevant art of hermetically sealed ceramic package discloses (Figs. 1-4, column 2 lines 10-35, 54-56, column 3 lines 3-10, 51-60) a package made up of a pair of flat plates base 10 and cap or lid 20, the base 10 provided with a metal block 30 facing the top plate and the lid 20 provided with a metal block 40, the flat plates (base and the lid) with the metal blocks being hermetically bonded by Au-Sn eutectic alloy as brazing solder 50. Morikawa further discloses this bonding of the metal blocks by brazing solder provides stable seal structure.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to seal the flat plates of the display vessel of Amrine by metal blocks each

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adhered to the top and bottom flat plates bonded by brazing solder as taught by Morikawa for providing stable seal structure for the vessel. Furthermore the Examiner notes that the claim limitation that "the fixing blocks are adhered by welding" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113). Therefore, it is the position of the examiner that it would have been obvious to one of ordinary skill in the art that the sealing vessel disclosed by Amrine in view of Morikawa is at least a fully functional equivalent to the Applicant's claimed invention.

Claim 13 essentially recites the same limitations as of claim 1 and hence is rejected for the same reason. Amrine discloses the sealing vessel assembly is a field emission display device.

Regarding claim 5 Amrine discloses (column 2 lines 14,15) the flat plates are made of glass.

Regarding claim 18 Amrine discloses a getter material attached to the inner surface (getter frame 320) of the frame member.

Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,894,193 to Amrine et al. and U.S. Patent 4,941,582 to Morikawa et al. and further in view of U.S. Patent 5,646,757 to Hayashi.

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Regarding claim 6 Amrine discloses the adhering member is a frit sealant.

Amrine does not disclose the frit sealant as low melting point glass.

Hayashi discloses (column 1 line 50) frit seal located on the circumference of lower substrate and upper dielectric sheet made of low melting point indicating frit seal and low melting point glass are art recognized equivalents.

It would have been obvious to one of ordinary skill in the art at the time of invention to use low melting point glass for adhering member as disclosed by Hayashi in the frit seal of Amrine for adhering the two flat plates as these tow materials are art recognized equivalents.

Claim 17 essentially recites the same limitation as of claim 6 and hence is rejected for the same reason.

Alternately claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,894,193 to Amrine et al. and U.S. Patent 4,941,582 to Morikawa et al . and further in view of JP 2001-206739 to Matsushita.

Referring to claims 1 and 13 Amrine and Morikawa disclose all the limitations except the adhering member adhering to the outer peripheral surface of the frame member.

Matsushita in analogous art of manufacturing display device disclose (please see English abstract, Figs. 2b, 2c) a display device comprising upper panel 1, lower panel 2, a frame glass 3 setting the interval between the two panels and frit bar 10 outside the frame member between the glass plates fused so that the space between the panels is filled and panels are stuck. Fig. 2c clearly discloses the frit member adhering to the

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outer peripheral surface of the frame member 3 between the two panels. It is noted that this design of adherence of the frit member adheres securely and tightly the two glass panels with good accuracy.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the adhering member of Amrine et al. and Morikawa by adhering to the outer peripheral surface of the frame member as taught by Matsushita for adhering the two flat plates securely and tightly with good accuracy.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

S.R.
Sikha Roy
Patent Examiner
Art Unit 2879


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PRIMARY EXAMINER**